Part Number: XZM2DG55W-3

3.2x1.6mm SMD CHIP LED LAMP

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant



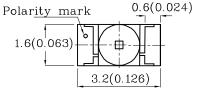


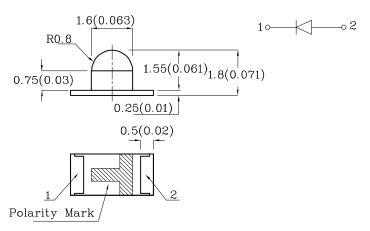


ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE

DEVICES

Package Schematics





Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)	Green (InGaN)	Unit		
Reverse Voltage V_R		5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle is 0.1ms Pulse Width		100	mA	
Power Dissipation		120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	450	V		

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

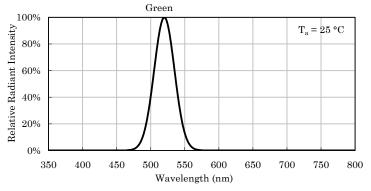
Operating Characteristics (T _A =25°C)	Green (InGaN)	Unit		
orward Voltage (Typ.) V_F =20mA)		3.2	V	
Forward Voltage (Max.) (I _F =20mA)	4	V		
Reverse Current (Max.) (V _R =5V)	${ m I}_{ m R}$	50	μА	
Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA)	λΡ	520*	nm	
Wavelength of Dominant Emission CIE127-2007*(Typ.) λD (I _F =20mA)		525*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	35	nm	
Capacitance (Typ.) $(V_F=0V, f=1MHz)$	С	100	pF	

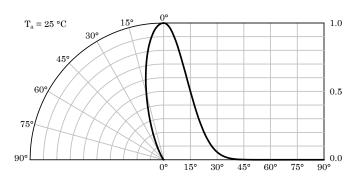
Part Number	Emitting Color	Emitting Material	Lens-color	CIE12	us Intensity 27-2007* mA) mcd	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2DG55W-3	Green	InGaN	Water Clear	3600*	5990*	520*	30°

^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.





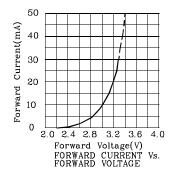


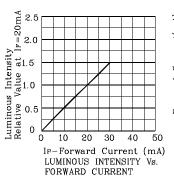


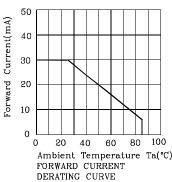
Relative Intensity Vs. CIE Wavelength

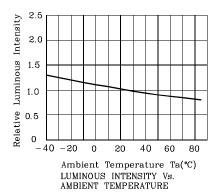
Spatial Distribution

Green



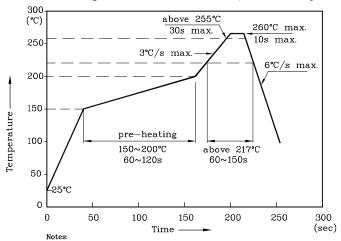






LED is recommended for reflow soldering and soldering profile is shown below.

Reflow Soldering Profile for SMD Products (Pb-Free Components)

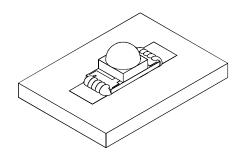


- 1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow.
- Do not apply any stress to the LED during high temperature conditions.
 Maximum number of soldering passes: 2

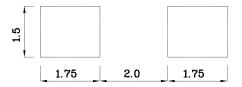




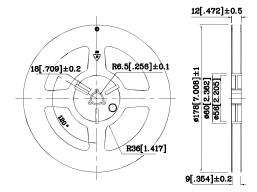
♦ The device has a single mounting surface. The device must be mounted according to the specifications.



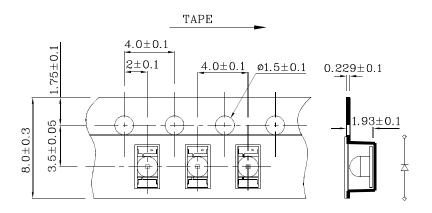
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ Tape Specification (Units:mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

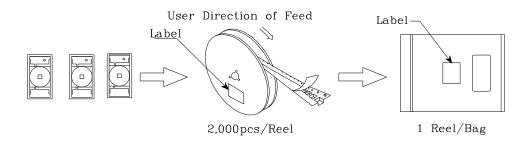
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

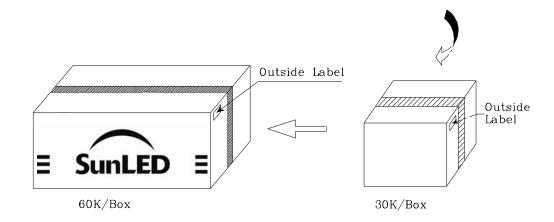
Note: Accuracy may depend on the sorting parameters.

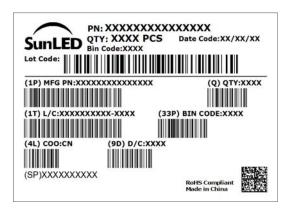




PACKING & LABEL SPECIFICATIONS







TERMS OF USE

- $1. \ Data \ presented \ in \ this \ document \ reflect \ statistical \ figures \ and \ should \ be \ treated \ as \ technical \ reference \ only.$
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at https://www.SunLEDusa.com/TechnicalNotes.asp

XDSB3586 V9-Z Layout: Maggie L.